



## ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

### M E M O R A N D U M

DATE: June 5, 1985  
TO: File  
FROM: Sue Ryan *JRH*  
SUBJECT: Michigan/R05-8410-03B  
Highland/Hi Mill Manufacturing  
MID005341714 MI-0413

A site inspection of the above named facility was conducted on May 21, 1985 by Sue Ryan and Paula Ventura. Hi Mill Manufacturing fabricates tubular aluminum, copper and brass parts. Process rinse water from dipping operations was discharged to an on-site lagoon prior to 1981. Spray evaporation was also used as a disposal method. Heavy metal contamination of the adjacent Highland Recreation area marsh sediments and water has been confirmed by the MDNR.

In November 1983, water, sludge and sediments were removed from the pond. The excavation reportedly went down one foot into clean clay and sand was used to fill in the hole. According to manifests in company files, the following quantity of waste was removed:

- 142 cubic yards contaminated soil
- 34,400 gallons contaminated sludge
- 63,300 gallons water (probably not the total quantity)

Current waste disposal practices include recycling more of the rinse water in the plant and off-site disposal of the remaining waste approximately every two months. The waste water is neutralized with caustic soda and stored in two 1600 gallon underground tanks prior to pickup by General Oil Company every two months. The site is completely fenced. Drinking and process water is obtained from two on-site wells that are between 60 and 80 feet deep.

14Z:5W



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604

## SITE INSPECTION NOTES

ME 0413-113

R5-8410-03B

MI 0413

Hi Mill Manufacturing  
Highland, MI

### Process & Waste Information

- fabricate tubular aluminum &  
copper parts also brass and some  
steel

- process water was discharged to  
a holding pond (1946-1981)

- source of water?

- pretreatment? none

- quantity of sludge / sediment removed

in 1983 cleanup of lagoons (lagoon size also)  
according to manifests → soil - 1142 yd<sup>3</sup>

Sludge - 34,400 gal.

water - > 63,300 gal.

→ -100' x 100'

- Description of total recycle process (online since 1979?)  
after dipping parts in acid they are dipped in 4  
successive rinse tanks containing water. This is  
the material that was dumped in the lagoon &  
now in the underground tanks.

- Wastes currently hauled off site for disposal -

- quantity & type acid pickling waste

- storage 2 1000 gallon underground tanks

- treatment / disposal method. neutralized w/ caustic soda and  
hauled off site for disposal

- Raw materials used at facility:

- nitric acid

- sulfuric acid

- dichromate

-  $TnE$  - degreasers → sent off site for recycling

Date: May 21, 1985

Time: 1<sup>00</sup> pm

FIT: Sue Ryan

Paula Ventura

Site Rep. Mr Robert Beard  
Dick Beard

Also, Norm (maintenance man)

Weather: sunny, 59°F  
northerly wind

## Process & Waste Info. (cont.)

Hi Mill  
p. 2

- current status of roof drain / parking lot drain situation:  
no problems any longer

drains to: downspouts are connected to pipes that run out to the marsh.

- observe: filled lagoon, sprayed areas, current waste storage areas. see photos.

- monitor wells installed by state? -6  
latest sampling

(Hi Mill has not even  
sampled the wells.)

Last sampling by MDNR

## History

- year operations started 1946
- owner > Hi Mill manufacturing
- operator
- parent company none

- previous owner/operator > none  
use of property

## Permits

- NPDES had a permit from 9/10/77-9/30/82 MI-0039047  
discharge from ponds
- status under RCRA - State Haz. Waste Permit  
generator -

- other permits: AIR # & exp. date  
no air permits according  
to Bob Beard.

## Physical

- size of site 2 1/2 acres
- # of employees 48
- water wells on site -  
sampled every 6 months depth - ~80' <sup>according to Norm: 60-80'</sup>  
use - drinking plant supply } both
- nearby wells - dist. to residents on private wells? yes
- # of buildings on site one building & a shed
- site slope - <sup>to the road in front of site?</sup> down towards - <sup>in back of site; slopes</sup> is toward marsh
- site security fence - yes  
guard

Distance to nearest: see topo map to check directions  
(include direction)

- residential area west on 59 ~0.3
- forest preserve (marsh) adjacent → S of site
- surface water NS recreational use?
- off site building on m 59 E
- industry
- ag land none irrigation?

Mr. Beard said that the marsh area behind the site never drains since the road repairs were done → something was blocked off. It used to dry out in the summer